AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims:

1-14 (canceled)

15. (currently amended) A method for detecting or staging anthrax infection in a vertebrate of interest, said method comprising detecting a level of soluble poly glutamic acid (PGA) in a biological sample from ~~a vertebrate~~ said vertebrate, wherein the level of said soluble poly glutamic acid is indicative of anthrax infection, or stage thereof, in said vertebrate.

16. (original) The method according to claim 15, wherein the level of said soluble poly glutamic acid is detected by an immunoassay.

17. (original) The method according to claim 16, wherein the immunoassay is a competitive assay.

18. (original) The method according to claim 16, wherein the immunoassay is in a direct format.

19. (original) The method according to claim 15, wherein the vertebrate is a human, and the biological sample is a blood sample.

20. (currently amended) The method according to claim 19, wherein said poly glutamic acid is poly γ-D-glutamic acid (γDPGA).

21. (currently amended) The method according to claim 19, further comprising comparing the level of said soluble poly glutamic acid in the biological sample to a reference level of said

soluble poly glutamic acid, wherein said reference level is an average level of soluble poly glutamic acid in blood samples from humans who have not been infected by *Bacillus anthracis*.

22-32 (canceled)

33. (previously presented) A method for detecting or staging anthrax infection in a vertebrate of interest, comprising contacting a biological sample prepared from said vertebrate with an anti-PGA antibody to detect a level of soluble PGA in said biological sample, wherein the level of soluble PGA in said biological sample is indicative of anthrax infection, or stage thereof, in said vertebrate.

34. (currently amended) The method of claim 33, comprising comparing the level of soluble PGA in said biological sample to a reference level of soluble PGA, wherein said reference level is an average level of soluble PGA in blood samples from reference vertebrates.

35. (previously presented) The method of claim 33, wherein said biological sample is a serum sample.

36. (previously presented) The method of claim 33, wherein said vertebrate is a human.

37. (new) The method of claim 36, wherein said biological sample is a body fluid sample.

38. (new) The method of claim 37, wherein said soluble PGA is poly γ-D-glutamic acid (γDPGA).

39. (new) The method of claim 38, wherein the level of said soluble PGA is detected by an antigen capture immunoassay.

40. (new) A method for detecting anthrax infection in a vertebrate of interest, said method comprising:

contacting a biological sample prepared from said vertebrate with an anti-PGA antibody; and

detecting a level of soluble PGA in said biological sample,

wherein the level of soluble PGA in said biological sample is indicative of anthrax infection in said vertebrate.

41. (new) The method of claim 40, wherein said biological sample is a body fluid sample.

42. (new) The method of claim 41, wherein said body fluid sample is a blood sample.

43. (new) The method of claim 41, wherein said vertebrate is a mammal.

44. (new) The method of claim 41, wherein said vertebrate is a human.

45. (new) The method of claim 44, wherein the level of soluble PGA is detected by an immunoassay.

46. (new) The method of claim 45, wherein said immunoassay is selected from the group consisting of an ELISA, an RIA, a lateral flow assay, a particle agglutination assay, a sandwich assay, and a protein chip assay.

47. (new) The method of claim 45, wherein said immunoassay is an antigen capture immunoassay.

48. (new) The method of claim 45, wherein said immunoassay is a non-competitive assay.

49. (new) The method according to claim 45, wherein said immunoassay is in a direct assay format.

50. (new) The method of claim 45, wherein said soluble PGA is γDPGA.

51. (new) A method for evaluating progression of anthrax infection in a vertebrate of interest, said method comprising:

contacting a biological sample prepared from said vertebrate with an anti-PGA antibody; and

detecting a level of soluble PGA in said biological sample,

wherein the level of soluble PGA in said biological sample is indicative of the progression of anthrax infection in said vertebrate.

52. (new) The method of claim 51, wherein said biological sample is a body fluid sample.

53. (new) The method of claim 52, wherein said body fluid sample is a blood sample.

54. (new) The method of claim 52, wherein said vertebrate is a mammal.

55. (new) The method of claim 52, wherein said mammal is human.

56. (new) The method of claim 55, wherein the level of soluble PGA is detected by an immunoassay.

57. (new) The method of claim 56, wherein said immunoassay is selected from the group consisting of an ELISA, an RIA, a lateral flow assay, a particle agglutination assay, a sandwich assay, and a protein chip assay.

58. (new) The method of claim 56, wherein said immunoassay is an antigen capture immunoassay.

59. (new) The method of claim 56, wherein said immunoassay is a non-competitive assay.

60. (new) The method of claim 56, wherein said immunoassay is in a direct format.

61. (new) The method of claim 56, wherein said soluble PGA is γDPGA.